

Position Paper 144/2023

Occupational Exposure Limits for nitrogen monoxide and nitrogen dioxide: end of the transition period for underground mining and tunnel construction

1. Background

To protect workers from risks arising from exposure to hazardous chemicals, the European Commission proposes indicative occupational exposure limit values (IOELVs). On 31 January 2017, the European Commission published a Directive (2017/164) establishing a fourth list of indicative occupational exposure limit values, including the ones for nitrogen monoxide (NO - 2.5mg/m³) and nitrogen dioxide (NO₂ - 0.96mg/m³).

For indicative occupational exposure limits, Member States must transpose the Directive by establishing national limits, taking into account the EU indicative values, but with a possibility to exceed them if explanations are provided to the European Commission (how the national legislation, specificities, practices or other elements justify this choice).

The Directive establishing exposure limit values for NO and NO₂ provides that Member States may benefit from a transitional period for underground mining and tunnelling, ending at the latest on 21 August 2023.

Substance of concern	Indicative OEL value	Legal framework	Transition period
Nitrogen monoxide (NO)	2.5 mg/m ³	Chemical Agents Directive (4th list) 2017/164 EU 31 January 2017	Transition period for underground mining and tunnel construction until 21 August 2023
Nitrogen dioxide (NO₂)	0.96mg/m ³		

2. Effects on health

Exposure to NO and NO₂ have serious effects on health:

- Corrosive to the eyes, skin and respiratory tract
- Asphyxiation due to swelling in the throat
- Lung oedema
- Long-term effect on the lungs

3. Issues linked to the end of the transition period

In 2017, the Advisory Committee for Safety and Health recognised that there were some concerns regarding the technical feasibility (and measurement methodology) to implement the limit values for NO

and NOx for mining and underground tunnelling. The Directive thus mentioned a transition period of 5 years for these specific sectors.

In 2019-2021, the European Commission services carried out a survey among Member States on the measures and potential difficulties of the implementation of the limit values before the end of the transitional period. By mid-January 2023, only one Member State had informed the Commission services about a possible need for a prolongation of the transitional period.

Euromines, which represents the employers of the European metals and minerals mining industry, has raised concerns that some of its members will not be able to meet the limit values before the end of the transition period, despite the progress already made in underground mining. The main reasons for non-compliance are, according to Euromines, unexpected difficulties due to the unavailability of certain machinery or other products used for underground mining activities that can limit exposure of workers to these substances. Euromines has requested an EU-level prolongation of the transitional period by a further 3 years.

4. IndustriAll Europe's position

Health and safety at work is a priority for industriAll Europe. Given the current industrial policy context, which may encourage new extractive activities in Europe, the need for more strategic autonomy in Europe, and the increased need for certain raw materials which are necessary for the green transition, it is of the utmost importance to have a strong framework at the EU level to protect the health and safety of workers in the extractive industries.

Given the fact that the 2017/164 Directive clearly set the rules and proposed a transition period for mining and underground tunnelling, which was already the result of a compromise, industriAll Europe will not demand an extension of the transition period at European level. Such a demand could set a risky precedent, undermining common EU standards and negatively impacting on the health and safety of workers, both in the Member States that are already complying with the limit values and also possibly harming progress with compliance elsewhere.

Nevertheless, industriAll Europe recognises that there are still some issues in certain sites or activities. Therefore, industriAll Europe underlines that these limit values are indicative and may be subject to adaptation at national level, if agreed by national social partners and accompanied by minimum conditions and guarantees defined by the social partners, such as a roadmap at company level, setting out:

- plans and timetables for the upgrading of sites and investment
- concrete measures to reduce concentrations as soon as possible, with a clear timeline
- preventive and protective health and safety measures to mitigate impacts on workers in the interim period